UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,635	09/28/2000	Gary Dan Dotson	00AB148	8217

7590   02/08/2006

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EXAMINER
NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
2677	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/672,635	DOTSON, GARY DAN
Office Action Summary	Examiner	Art Unit
	Kimnhung Nguyen	2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 11/17/05.*

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-13,16,17,19,21-23 and 25-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7,11 and 21-23* is/are rejected.

7)☒ Claim(s) *4,9-10, 12-13,16-17, 19 and 25-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1-7,9-13, 16-17, 19, 21-23 and 25-27

are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 5-7, 11, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Matsuo et al. (US 5,192,943) in view of Muhich et al. (US 4,706,074).

Regarding claims 1, 5 and 21, Matsuo et al. discloses in figs. 1 and 5, a video controller

for interfacing a frame buffer (90, fig. 1) to a dual scan display having a adjacent first (510, fig.

5) and a second display portions (510, fig. 5) with a display boundary there between, the video

controller comprising a raster engine (display screen) that receives video data from the frame

buffer to format the video data and render the formatted data to the dual scan display line by line,

and a hardware cursor (cursor mask signal) that selectively overlays a cursor image across the

display boundary onto the first and second display portions.

However, Prince does not disclose the hardware cursor comprises a cursor line buffer

that overlays a first portion of the cursor image into a first data path of the raster engine

according to a comparison of a first vertical counter value with a first cursor start address and a

comparison of a horizontal counter value in the raster engine with a cursor column start value

and a cursor image width value in the hardware cursor.

Muhich et al. discloses in figs. 2, 3 hardware cursor(cursor control 30) comprises a

cursor line buffer that overlays a first portion of the cursor image into a first data path of the

raster engine according to a comparison of a first vertical counter value with a first cursor start

address and a comparison of a horizontal counter value in the raster engine with a cursor column

start value and a cursor image width value in the hardware cursor (see registers 28, 29 for storing

the position of a cursor, values stored in the registers are compared to counter values during scan

(the X and Y cursors position 28, 29 are cursors start addresses, see col. 2, lines 63-66).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to implement a cursor line buffer that overlays a first portion of the cursor image into a

first data path of the raster engine according to a comparison of a first vertical counter value with

a first cursor start address and a comparison of a horizontal counter value in the raster engine

with a cursor column start value and a cursor image width value in the hardware cursor as taught

by Muhich et al. into the dual scan display of Masuo et al. because this would provide a desired

screen position of the cursor, represent X and Y screen coordinates respectively for the user (see

col. 2, lines 58-62).

Regarding claims 2, 3, 22, Matsuo et al. discloses in fig. 5, the raster engine comprises

first data path (because first frame having a first data path) and second (a second frame having

second data path) data path, the first and second data paths respectively associated with first and

second display portions, and the hardware cursor overlays a first portion of the cursor image onto

the first display portion and overlays a second portion of the cursor image onto the second

display portion if the cursor crosses the display boundary (see fig. 5).

Regarding claim 6, Matsuo et al. discloses that the cursor image crosses the display boundary according to the cursor position (fig. 5)

Regarding claims 7, 23, Matsuo et al. does not disclose the method comprising determining first and second portions of the cursor image if the cursor image crosses the display boundary; overlaying the first portion of the cursor image onto the first display portion if the cursor crosses the display boundary; and overlaying the second portion of the cursor image onto the second display portion if the cursor crosses the display boundary.

Muhich et al. discloses in figs. 2-3 that first and second portions of the cursor image (28, 29 fig. 2 or 13, 14 fig. 3) if the cursor image crosses the display boundary; overlaying the first portion of the cursor image onto the first display portion if the cursor crosses the display boundary; and overlaying the second portion (29 fig. 2 or 14 fig. 3) of the cursor image onto the second display portion if the cursor crosses the display boundary.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of the first and second portions of the cursor crosses the display boundary as taught by Muhich into the system of Matsuo et al. because this would provide the X and Y screen coordinates respectively and determine whether video formatting is within the range of the cursor (see col. 2, lines 60-66).

Regarding claim 11, Matsuo does not disclose that overlaying the first portion of the cursor image onto the first display portion comprises selectively inserting first portion cursor data associated with the first portion of the cursor image into a first data path of the raster engine according to the comparison of the first vertical counter value with the first cursor start address

and the first cursor portion height value and the comparison of the horizontal counter value with the cursor column start value and the cursor image width value.

Muhich et al. discloses that overlaying the first portion of the cursor image onto the first display portion comprises selectively inserting first portion cursor data associated with the first portion of the cursor image into a first data path of the raster engine according to the comparison of the first vertical counter value with the first cursor start address (see fig. 2, see X or Y cursors position 28, 29 are cursors start addresses, see col. 2, lines 63-66) and the first cursor portion height value and the comparison of the horizontal counter value with the cursor column start value and the cursor image width value (see fig. 5, see cursor location (X, Y) having height value).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement overlaying the first portion of the cursor image onto the first display portion comprises selectively inserting first portion cursor data associated with the first portion of the cursor image into a first data path of the raster engine according to the comparison of the first vertical counter value with the first cursor start address as taught by Muhich et al. into the system of Matsuo et al. because this would allow a maximum cursor image on the display screen of forty eight pixels wide by sixty four pixels high (see col. 5, lines 65-67), that help for the user for easily to see the image.

Allowable Subject Matter

3.   Claims 4, 9-10, 12-13, 16-17, 19 and 25-27 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

(See previous Office Action).

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698.

The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
January 27, 2006

AMR A. AWAD
PRIMARY EXAMINER